



# Monthly Wholesale Trade

## Sales and Inventories

U.S. Department of Commerce  
Economics and Statistics Administration  
BUREAU OF THE CENSUS

**April 1997**  
BW/97-04  
Issued June 1997

**Sales.** April 1997 sales of merchant wholesalers, after adjustment for seasonal variation and trading-day differences but not for price changes, were \$210.2 billion, unchanged (+/-0.7%) from the revised March level but 5.2 percent (+/-1.2%) above April 1996. The March preliminary estimate was revised upward by \$0.3 billion or 0.2 percent. April sales of durable goods increased 1.5 percent (+/-0.6%) from March and were 5.8 percent (+/-2.5%) above last year. Compared to last month, sales of metals and minerals, except petroleum were up 5.3 percent to \$8.9 billion and lumber and other construction materials rose 3.7 percent to \$7.6 billion. Sales of nondurable goods were down 1.6 percent (+/-1.0%) from March but were 4.5 percent (+/-2.0%) higher than April 1996. Compared to last month, sales of petroleum and petroleum products declined 7.8 percent to \$14.6 billion while sales of apparel, piece goods and notions increased 3.7 percent to \$7.6 billion.

**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variation but not for price changes, were \$257.6 billion at the end of April, down 0.7 percent (+/-0.4%) from the revised March level but unchanged (+/-2.6%) from April

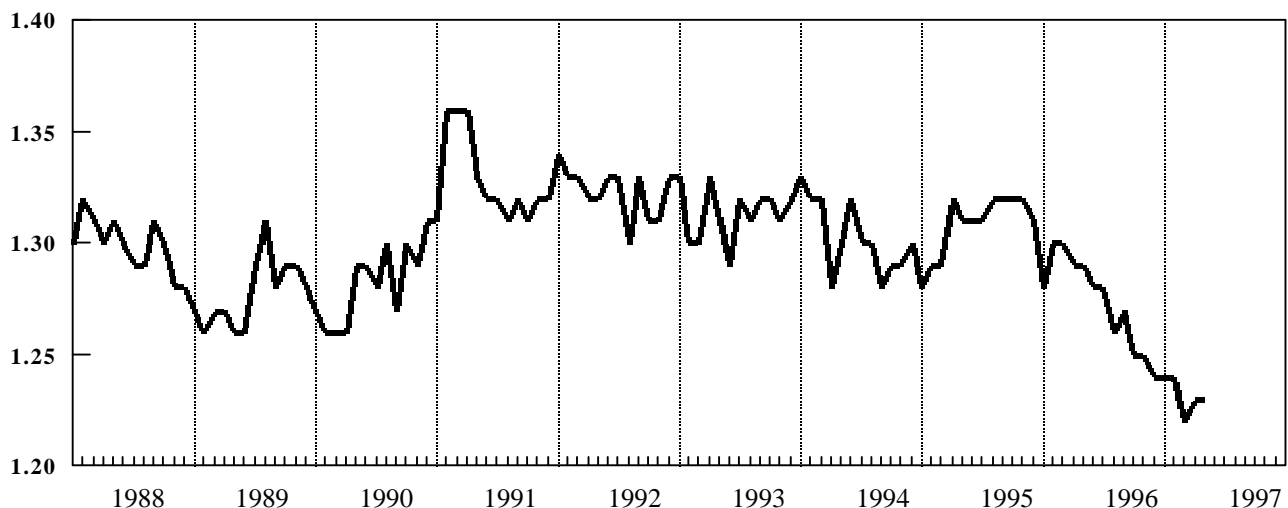
1996. The March preliminary estimate was revised downward by \$0.5 billion or 0.2 percent. Among durable goods, inventories of furniture and home furnishings were up 5.8 percent from last month to \$5.2 billion. Inventories of motor vehicles and automotive equipment fell 2.7 percent to \$26.3 billion. End-of-month inventories of nondurable goods wholesalers were down 1.8 percent (+/-0.4) from last month and were 2.3 percent (+/-1.8%) below April 1996. Compared to last month, inventories of drugs, drug proprietaries and druggists' sundries were down 3.0 percent to \$13.8 billion.

**Inventories/Sales Ratio.** The April inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.23. The April 1996 ratio was 1.29.

*Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/96-RV Current Business Report.*

### Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1988 to 1997

(Data adjusted for seasonal, and trading-day differences, but not for price changes)



Monthly Wholesale Trade for May is scheduled to be released July 9, 1997 at 10:00 a.m.

Address inquiries concerning this report to Services Division, Bureau of the Census, Washington, DC 20233, or call Ronald Pienycoski, (301) 457-2779 or 457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the internet - <http://www.census.gov/svds/www/mwts.html>.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1997 and 1996

[In millions of dollars]

SIC <sup>1</sup> code	Kind of business	Sales						Inventories						Inventories/Sales		
		Monthly			Percent change			Monthly			Percent change					
		Apr. 1997 (P)	Mar. 1997 (r)	Apr. 1996 (r)	Apr./ Mar.	Mar./ Feb.	Apr. 97 Apr. 96	Apr. 1997 (P)	Mar. 1997 (r)	Apr. 1996 (r)	Apr./ Mar.	Mar./ Feb.	Apr. 97 Apr. 96	Apr. 1997 (P)	Mar. 1997 (r)	Apr. 1996 (r)
Adjusted <sup>2</sup>																
	U.S. Total	210,187	210,195	199,853	0.0	-0.8	5.2	257,639	259,389	257,612	-0.7	0.5	0.0	1.23	1.23	1.29
50	Durable	108,835	107,198	102,829	1.5	-1.3	5.8	164,034	164,081	161,840	0.0	0.7	1.4	1.51	1.53	1.57
501	Automotive	18,065	18,274	17,597	-1.1	0.1	2.7	26,348	27,078	27,502	-2.7	1.6	-4.2	1.46	1.48	1.56
502	Furniture	3,639	3,595	3,602	1.2	-5.3	1.0	5,230	4,943	5,110	5.8	-3.4	2.3	1.44	1.37	1.42
503	Lumber	7,586	7,312	6,834	3.7	-2.8	11.0	7,925	7,748	7,417	2.3	0.3	6.8	1.04	1.06	1.09
504	Prof. equip.	20,863	20,587	18,942	1.3	-0.6	10.1	22,495	22,216	22,440	1.3	-0.9	0.2	1.08	1.08	1.18
505	Metals	8,859	8,413	8,094	5.3	-4.1	9.5	13,553	13,370	12,356	1.4	-0.3	9.7	1.53	1.59	1.53
506	Electrical	14,713	14,746	14,598	-0.2	0.8	0.8	23,927	23,977	24,141	-0.2	2.4	-0.9	1.63	1.63	1.65
507	Hardware	6,451	6,227	5,717	3.6	0.9	12.8	12,426	11,978	11,346	3.7	-2.1	9.5	1.93	1.92	1.98
508	Machinery	15,753	15,423	15,821	2.1	-4.5	-0.4	36,170	36,485	35,427	-0.9	1.6	2.1	2.30	2.37	2.24
509	Other Durable	12,906	12,621	11,624	2.3	0.6	11.0	15,960	16,286	16,101	-2.0	1.1	-0.9	1.24	1.29	1.39
51	Nondurable	101,352	102,997	97,024	-1.6	-0.2	4.5	93,605	95,308	95,772	-1.8	0.2	-2.3	0.92	0.93	0.99
511	Paper	7,520	7,436	6,814	1.1	-1.5	10.4	8,702	8,850	8,292	-1.7	0.8	4.9	1.16	1.19	1.22
512	Drugs	9,574	9,606	8,233	-0.3	2.1	16.3	13,758	14,181	12,641	-3.0	2.8	8.8	1.44	1.48	1.54
513	Apparel	7,557	7,284	6,269	3.7	-3.5	20.5	12,279	12,162	12,046	1.0	1.1	1.9	1.62	1.67	1.92
514	Groceries	27,650	28,088	25,934	-1.6	2.4	6.6	17,454	17,685	17,598	-1.3	-0.3	-0.8	0.63	0.63	0.68
515	Farm-products	9,441	9,262	10,673	1.9	-7.7	-11.5	9,234	9,394	12,652	-1.7	-1.4	-27.0	0.98	1.01	1.19
516	Chemicals	4,591	4,529	4,418	1.4	-0.3	3.9	4,724	4,737	4,621	-0.3	0.9	2.2	1.03	1.05	1.05
517	Petroleum	14,606	15,838	14,802	-7.8	-2.3	-1.3	5,136	5,268	5,190	-2.5	-4.7	-1.0	0.35	0.33	0.35
518	Alcohol	4,625	4,828	4,687	-4.2	2.4	-1.3	4,947	4,968	4,941	-0.4	2.0	0.1	1.07	1.03	1.05
519	Other Nondur.	15,788	16,126	15,194	-2.1	2.0	3.9	17,371	18,063	17,791	-3.8	-0.4	-2.4	1.10	1.12	1.17
Not Adjusted														Sales to date		
	U.S. Total	210,984	213,120	201,259	-1.0	10.2	4.8	259,583	260,469	259,534	-0.3	-0.2	0.0	816,697	774,636	
50	Durable	108,582	109,609	102,990	-0.9	11.7	5.4	165,141	164,045	162,920	0.7	0.5	1.4	414,846	397,693	
501	Automotive	18,968	19,370	18,406	-2.1	16.8	3.1	26,901	27,403	28,080	-1.8	-1.2	-4.2	71,308	70,203	
502	Furniture	3,657	3,570	3,609	2.4	5.5	1.3	5,141	4,933	5,028	4.2	-1.6	2.2	13,910	13,421	
503	Lumber	7,760	7,041	6,978	10.2	11.2	11.2	8,147	8,097	7,640	0.6	2.6	6.6	27,471	25,279	
504	Prof. equip.	19,841	21,452	18,071	-7.5	13.5	9.8	22,607	22,194	22,552	1.9	0.0	0.2	79,547	71,708	
505	Metals	9,355	8,640	8,474	8.3	4.2	10.4	13,634	13,490	12,442	1.1	1.6	9.6	34,758	32,841	
506	Electrical	14,183	14,982	14,072	-5.3	12.2	0.8	23,760	23,402	23,948	1.5	0.2	-0.8	56,059	56,831	
507	Hardware	6,386	5,804	5,643	10.0	9.2	13.2	12,538	12,098	11,448	3.6	-0.7	9.5	23,034	21,230	
508	Machinery	16,352	16,318	16,834	0.2	9.9	-2.9	36,676	36,777	35,923	-0.3	2.1	2.1	62,155	62,920	
509	Other Durable	12,080	12,432	10,903	-2.8	11.9	10.8	15,737	15,651	15,859	0.5	0.4	-0.8	46,604	43,260	
51	Nondurable	102,402	103,511	98,269	-1.1	8.7	4.2	94,442	96,424	96,614	-2.1	-1.3	-2.2	401,851	376,943	
511	Paper	7,415	7,362	6,698	0.7	4.2	10.7	8,885	8,885	8,466	0.0	1.0	4.9	29,355	26,926	
512	Drugs	9,775	9,414	8,431	3.8	8.9	15.9	13,758	14,138	12,628	-2.7	0.8	8.9	37,581	33,186	
513	Apparel	7,126	7,626	5,755	-6.6	2.1	23.8	11,812	11,797	11,552	0.1	-3.1	2.3	29,117	23,172	
514	Groceries	27,235	28,285	25,649	-3.7	14.5	6.2	17,210	17,349	17,352	-0.8	0.9	-0.8	106,759	101,991	
515	Farm-products	9,460	9,568	10,673	-1.1	-2.5	-11.4	9,336	10,484	12,804	-11.0	-10.4	-27.1	39,800	44,244	
516	Chemicals	4,811	4,611	4,612	4.3	7.9	4.3	4,790	4,832	4,681	-0.9	1.0	2.3	18,157	17,281	
517	Petroleum	14,504	15,474	14,817	-6.3	1.1	-2.1	5,018	5,073	5,065	-1.1	-5.1	-0.9	62,802	55,861	
518	Alcohol	4,630	4,432	4,678	4.5	16.4	-1.0	4,977	4,864	4,976	2.3	4.7	0.0	16,617	16,822	
519	Other Nondur.	17,446	16,739	16,956	4.2	18.4	2.9	18,656	19,002	19,090	-1.8	-0.4	-2.3	61,663	57,460	

p Preliminary estimate. r Revised.

1 For a full description of the SIC Codes shown above see the "1987 Standard Industrial Classification Manual" or the Current Business Reports

\*Combined Annual and Revised Monthly Wholesale Trade" publication.

2 Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

**Table 2. Coefficients of Variation and Standard Error for Sales and Inventories**

SIC code	Kind of business	Coefficients of variation for level (x 100)				Standard error for trend				Coefficients of variation for level (x 100)		Standard error for trend
		Preliminary estimates		Final estimates		Ratio of two consecutive months		Year to Year Estimates		Cumulative sales estimates		Current year cumulative to previous year cumulative
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	CY	PY	
		Median	Median	Median	Median	Median	Median	Median	Median			
	<b>U.S. Total</b>	<b>1.0</b>	<b>1.4</b>	<b>1.0</b>	<b>1.4</b>	<b>0.4</b>	<b>0.2</b>	<b>0.8</b>	<b>1.6</b>	<b>1.0</b>	<b>0.8</b>	<b>0.8</b>
<b>50</b>	<b>Durable</b>	<b>2.0</b>	<b>2.2</b>	<b>1.9</b>	<b>2.3</b>	<b>0.6</b>	<b>0.3</b>	<b>1.5</b>	<b>2.4</b>	<b>1.9</b>	<b>1.2</b>	<b>1.5</b>
501	Automotive	4.0	3.5	3.3	3.7	1.2	1.1	3.6	3.9	3.4	3.0	3.0
502	Furniture	5.1	7.0	5.6	7.0	1.8	1.1	4.0	11.2	5.2	4.2	3.7
503	Lumber	5.7	5.1	5.2	5.0	1.2	0.9	6.2	5.5	5.4	2.2	5.8
504	Prof. equip.	5.6	7.0	5.7	7.2	1.4	0.9	6.3	5.1	5.8	3.0	4.9
505	Metals	4.9	9.0	4.7	8.5	1.2	0.6	3.0	10.3	4.5	3.7	2.3
506	Electrical	4.8	4.3	4.0	4.4	1.1	0.6	3.2	3.1	4.3	3.0	2.7
507	Hardware	5.0	4.2	4.3	4.1	1.7	0.5	6.4	4.3	4.4	2.6	5.5
508	Machinery	5.1	4.4	5.4	4.4	1.8	0.5	4.8	5.5	5.1	1.9	5.1
509	Other Durable	4.3	6.5	4.0	6.4	1.6	1.0	3.0	6.4	4.0	3.4	2.4
<b>51</b>	<b>Nondurable</b>	<b>1.7</b>	<b>1.9</b>	<b>1.9</b>	<b>1.8</b>	<b>0.6</b>	<b>0.3</b>	<b>1.2</b>	<b>1.1</b>	<b>1.7</b>	<b>1.3</b>	<b>1.3</b>
511	Paper	3.4	3.7	3.3	3.9	1.0	0.4	3.1	4.0	3.2	3.5	3.0
512	Drugs	5.6	5.2	5.5	4.9	0.4	0.4	3.3	2.3	5.5	5.0	3.2
513	Apparel	5.1	7.7	4.7	7.9	2.0	0.6	5.1	5.3	4.7	2.9	3.7
514	Groceries	3.3	4.7	3.1	4.8	0.7	0.6	2.1	4.8	3.1	2.8	2.0
515	Farm-products	5.5	6.1	5.6	6.4	2.0	0.5	4.3	4.8	5.7	3.1	3.8
516	Chemicals	5.2	13.9	5.1	13.9	1.1	1.0	3.8	12.4	5.0	4.1	3.0
517	Petroleum	6.8	5.8	6.4	5.8	1.2	1.2	8.5	6.0	6.4	4.9	8.3
518	Alcohol	5.4	5.7	5.9	5.7	2.5	1.3	6.8	5.5	5.3	2.0	6.6
519	Other Nondur.	5.8	5.7	5.5	5.4	2.2	1.7	7.6	5.4	5.8	1.9	7.4

Note: The median measures of variability are based on the most recent 5 months of data.

### Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65 \times 0.9\%$  or  $\pm 1.5\%$ , and the 90% confidence interval is  $-0.3\%$  to  $+2.7\%$ . If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65 \times CV \times$  (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain

information about all sample cases, (3) response errors, possibly due to definitional difficulties or misreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 26 percent of the total monthly wholesale sales estimates and 28 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

Official Business

Penalty for Private Use, \$300

Table 3. Seasonal Adjustment Factors for Sales and Inventories

SIC code	Kind of business	Sales						Inventories					
		1997					1996		1997				1996
		May	Apr.	Mar.r	Feb.	Jan.	Apr.r	May	Apr.	Mar.r	Feb.	Jan.	Apr.r
	<b>U.S. Total<sup>1</sup></b>	<b>1.019</b>	<b>1.004</b>	<b>1.012</b>	<b>0.914</b>	<b>0.958</b>	<b>1.008</b>	<b>0.996</b>	<b>1.007</b>	<b>1.004</b>	<b>1.013</b>	<b>1.022</b>	<b>1.007</b>
<b>50</b>	<b>Durable</b>	<b>1.003</b>	<b>1.000</b>	<b>1.023</b>	<b>0.905</b>	<b>0.931</b>	<b>1.001</b>	<b>1.007</b>	<b>1.009</b>	<b>0.999</b>	<b>1.003</b>	<b>1.000</b>	<b>1.009</b>
501	Automotive	1.046	1.050	1.060	0.908	0.912	1.046	1.013	1.021	1.012	1.041	1.017	1.021
502	Furniture	1.023	1.005	0.993	0.891	0.887	1.002	1.008	0.983	0.998	0.979	0.974	0.984
503	Lumber	1.063	1.023	0.963	0.841	0.870	1.021	1.022	1.028	1.045	1.021	0.992	1.030
504	Prof. equip.	0.962	0.951	1.042	0.913	0.988	0.954	0.993	1.005	0.999	0.990	1.016	1.005
505	Metals	1.041	1.056	1.027	0.945	0.985	1.047	0.999	1.006	1.009	0.990	1.012	1.007
506	Electrical	0.968	0.964	1.016	0.912	0.942	0.964	1.007	0.993	0.976	0.998	0.999	0.992
507	Hardware	1.000	0.990	0.932	0.861	0.900	0.987	1.020	1.009	1.010	0.996	0.981	1.009
508	Machinery	1.037	1.038	1.058	0.920	0.928	1.064	1.011	1.014	1.008	1.003	0.991	1.014
509	Other Durable	0.958	0.936	0.985	0.886	0.899	0.938	1.011	0.986	0.961	0.968	0.983	0.985
<b>51</b>	<b>Nondurable</b>	<b>1.031</b>	<b>1.011</b>	<b>1.004</b>	<b>0.922</b>	<b>0.987</b>	<b>1.015</b>	<b>0.974</b>	<b>1.010</b>	<b>1.016</b>	<b>1.031</b>	<b>1.059</b>	<b>1.010</b>
511	Paper	0.980	0.986	0.990	0.936	1.025	0.983	0.985	1.021	1.004	1.002	1.023	1.021
512	Drugs	0.961	1.021	0.980	0.919	1.064	1.024	0.947	1.000	0.997	1.017	1.079	0.999
513	Apparel	0.837	0.943	1.047	0.990	0.920	0.918	0.965	0.962	0.970	1.012	1.043	0.959
514	Groceries	1.045	0.985	1.007	0.901	0.992	0.989	0.985	0.986	0.981	0.969	1.005	0.986
515	Farm-products	1.008	1.002	1.033	0.978	1.116	1.000	0.890	1.011	1.116	1.228	1.296	1.012
516	Chemicals	1.064	1.048	1.018	0.941	0.983	1.044	1.020	1.014	1.020	1.019	0.987	1.013
517	Petroleum	1.040	0.993	0.977	0.944	1.034	1.001	0.998	0.977	0.963	0.968	0.971	0.976
518	Alcohol	1.067	1.001	0.918	0.808	0.812	0.998	0.986	1.006	0.979	0.954	0.937	1.007
519	Other Nondur.	1.126	1.105	1.038	0.894	0.878	1.116	1.023	1.074	1.052	1.052	1.046	1.073



r Revised

1 Adjusted sales and inventories data shown in table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.